



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,625	09/27/2001	Yar-Ming Wang	GP-301034	9716

7590 11/20/2002

JEFFREY A. SEDLAR
General Motors Corporation
Legal Staff, Mail Code 428-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

WONG, EDNA

ART UNIT	PAPER NUMBER
----------	--------------

1741

5

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action SummaryApplication No. **21**

09/963,625

Applicant(s)

WANG ET AL.

Examiner

Edna Wong

Art Unit

1741

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

This is in response to the Amendment dated November 4, 2002. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

Specification

The disclosure has been objected to because of minor informalities.

The objection to the disclosure has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 112

Claims **2-4 and 7** have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 2-4 and 7 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 103

I. Claims **1-4 and 7** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Sekinger et al.** (US Patent No. 5,975,976).

The rejection of claims 1-4 and 7 under 35 U.S.C. 103(a) as being unpatentable

Art Unit: 1741

over Sekinger et al. has been withdrawn in view of Applicants' amendment.

II. Claims **5 and 6** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Sekinger et al.** (US Patent No. 5,975,976).

The rejection of claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Sekinger et al. has been withdrawn in view of Applicants' amendment.

Response to Arguments

Claim Objections

Claim **2** is objected to because of the following informalities:

Claim 2

line 2, the word "a" (both occurrences) should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

I. Claims **1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sekinger et al.** (US Patent No. 5,975,976).

Sekinger teaches a method of forming a bright anodized coating on a surface of an aluminum alloy article, when said alloy contains more than 3% by weight magnesium (= 0.25 wt.% to 5 wt.% magnesium) [col. 4, lines 56-59], said method comprising:

anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid per liter of bath (= 40 to 350 g/l) [col. 6, lines 30-33] at a temperature (= -5 and 85 °C) [col. 5, lines 25-36] and a current density (= 100 to 3000 A/m²) [col. 5, line 66 to col. 6, line 3] that produces a desired thickness (= 50 nm to 20 μm) [= col. 5, lines 1-9].

The temperature is in the range of 18 to 25 °C (= -5 and 85 °C) [col. 5, lines 25-36] and the current density is in the range of about 3 A/ft² to no more than 10 A/ft² (= 32.29 A/m² to 107.64 A/m²) [= 100 to 3000 A/m²] (col. 5, line 66 to col. 6, line 3).

Prior to the anodizing step, the surface to be anodized is immersed in an aqueous acid solution (= nitric acid) at a temperature below about 100°F (= 38°C) [= 20-25°C], said solution comprising 10-30% nitric acid (= 25 to 35 wt.%) [col. 5, lines 40-47].

The surface is established as an anode (col. 5, lines 29-36) in a direct current circuit (col. 7, lines 47) with said solution as an electrolyte and applying a direct current voltage of 10 to 25 volts to said surface (= 10 to 100 V) [col. 5, line 66 to col. 6, line 3].

Sekinger does not teach producing a clear anodized layer suitable for color finishing.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one skilled in the art would have been motivated to have modified the method of Sekinger by producing a clear anodized layer suitable for color finishing because Sekinger appears to disclose a

Art Unit: 1741

method at least in a similar manner as instantly claimed. There does not appear to be any method limitations set forth in the instant claims to distinguish the instant claims from the prior art. Therefore, it would have been within the skill of the art to expect that the method disclosed by Sekinger produces a clear anodized layer suitable for color finishing, absent evidence to the contrary.

As to wherein the immersing is until the magnesium content in said surface is reduced to less than 3% and to produce a glossy surface, Sekinger appears to disclose a method at least in a similar manner as instantly claimed. There does not appear to be any method limitations set forth in the instant claims to distinguish the instant claims from the prior art. Therefore, it would have been within the skill of the art to expect that the method disclosed by Sekinger immerses the surface to be anodized until the magnesium content in said surface is reduced to less than 3% and to produce a glossy surface, absent evidence to the contrary.

Furthermore, Sekinger teaches neutralizing for 20 to 60 seconds (col. 5, lines 43-47).

As to during said immersing step, establishing said surface as an anode in a direct current circuit with said solution as the electrolyte and applying a direct current voltage to said surface, Sekinger teaches that the electrolyte may be a mixture of sulfuric acid, phosphoric acid, chromic acid, oxalic acid, sulphaminic acid, malonic acid,

Art Unit: 1741

maleic acid and/or sulphosalicylic acid, e.g., 250-300 g/l maleic acid and 1-10 g/l sulfuric acid (col. 6, lines 23-42). Thus, 10-20% sulfuric acid, 10-30% nitric acid or 40-80% phosphoric acid appears to be well within the skill of the artisan since the concentration of the solution is a variable as taught by Sekinger.

Furthermore, the repetition of the anodizing step to provide the same results is well within the skill of one having ordinary skill in the art. The concept of duplication is not patentable. *St. Regis Paper Co. v. Bemis Co. Inc.*, 193 USPQ 8, 11 (7th Cir. 1977). While this decision relates to the duplication of parts, there is no reason why such duplication cannot be extended to a process step.

II. Claims **5-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sekinger et al.** (US Patent No. 5,975,976).

Sekinger teaches a method of making a component, said component comprising a formed sheet of an aluminum alloy containing more than about 4% by weight magnesium (= 0.25 wt.% to 5 wt.% magnesium) [col. 4, lines 56-59], said method comprising:

(a) forming said sheet into a component having a surface requiring a decorative finish (col. 4, lines 33-43);

(b) anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid (= 40 to 350 g/l) [col. 6, lines 30-33] at a temperature in the range of 18 to 25°C (= -5 and 85 °C) [col. 5, lines 25-36] and a current density in the range of

about 3 to no more than 10 A/ft² (= 100 to 3000 A/m²) of said surface to form a coating of aluminum oxide [col. 5, line 66 to col. 6, line 3] having a thickness of about 10 to 25 μm (= 50 nm to 20 μm) [=col. 5, lines 1-9].

Prior to the anodizing step, the surface to be anodized is immersed in an aqueous acid solution (= nitric acid) at a temperature below about 100°F (= 38°C) [= 20-25°C], said solution comprising 10-30% nitric acid (= 25 to 35 wt.%) [col. 5, lines 40-47].

The surface is established as an anode (col. 5, lines 29-36) in a direct current circuit (col. 7, lines 47) with said solution as an electrolyte and applying a direct current voltage of 10 to 25 volts to said surface (= 10 to 100 V) [col. 5, line 66 to col. 6, line 3].

Sekinger does not wherein the coating of aluminum oxide is clear.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one skilled in the art would have been motivated to have modified the method of Sekinger with wherein the coating of aluminum oxide is clear because Sekinger appears to disclose a method at least in a similar manner as instantly claimed. There does not appear to be any method limitations set forth in the instant claims to distinguish the instant claims from the prior art. Therefore, it would have been within the skill of the art to expect that the method disclosed by Sekinger produces a clear anodized layer, absent evidence to the contrary.

As to wherein the component is a body component for an automotive vehicle, a

Art Unit: 1741

preamble is not necessarily accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. *In re Hirao* 535 F. 2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie* 187 F 2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Response to Remarks

Applicants state that the Examiner ignore the prior art as reflected in *Powers et al.*, *Timm et al.* and page 276 of *Wernick et al.* In response, the Examiner did consider these references and deemed that Sekinger read on the claims the best.

Applicants state that Sekinger has nothing to do with producing colored anodized aluminum. In response, Sekinger teaches anodizing conditions that encompasses the conditions as presently claimed. Although the Applicant has a different reason for, or advantage resulting from doing what the prior art relied upon has suggested, it is noted that it is well settled that this is not demonstrative of nonobviousness. *In re Kronig* 190 USPQ 425, 428 (CCPA 1976); *In re Linter* 173 USPQ 560 (CCPA 1972); the prior art motivation or advantage may be different than that of Applicants while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979); *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985) and MPEP § 2144.

Applicants state that Sekinger teaches nothing about making a clear anodized coating on a high magnesium content alloy for automotive finishes. In response, the present claims fails to recite a method that would produce a clear anodized layer. If there is, what part of:

“anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid per liter of bath at a temperature and a current density” (from claim 1, lines 4-6); and

“anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid at a temperature in the range of 18 to 25°C and a current density in the range of about 3 to no more than 10 A/ft² of said surface” (from claim 5, lines 7-10)

would do this? Applicants' claims as presently written contain an anodizing step that reads on the method disclosed of Sekinger.

Applicants state that there is nothing that is critical or selective in the Sekinger anodizing process. In response, the disclosure of reference must be considered for what it fairly teaches one of ordinary skill in the art. See MPEP § 2123.

Applicants state that one skilled in the art would painstakingly try every Sekinger bath composition, voltage, current density and the like until he found the processes specified by Applicants' claims 1-7. There is no suggestion in Sekinger that

anything in that disclosure would be helpful in making a clear anodized layer on a high magnesium content alloy. In response, Applicants' claim 1 has only one specific anodizing condition recited, i.e., "100 to 200 grams of sulfuric acid per liter of bath" (claim 1, line 5). All other conditions are undefined. Thus, it appears that there would have been no pain suffered by the skilled artisan to arrive at this one required condition.

As for claim 5, although narrower anodizing conditions are recited, i.e., "100 to 200 grams of sulfuric acid at a temperature in the range of 18 to 25°C and a current density in the range of about 3 to no more than 10 A/ft² of said surface", there doesn't appear to be any criticality to these conditions since the broader conditions in claim 1 can just as well be applied.

Applicants state that the Examiner hasn't explained how one skilled in the art could struggle through all of these prior art disclosures to arrive at the processes specified in claims 1-7. The case citations relied on by the Examiner have not addressed any of these issues. In response, the claims were not rejected over the Powers et al., Timm et al. and page 276 by Wernick et al.

The Examiner requests that Applicants point out where would be the struggle for one skilled in the art to achieve "anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid per liter of bath at a temperature and a current density". This is the only positive method step in claim 1, lines 4-7.

What the method produces in present claim 1, i.e., a desired thickness of a clear anodized layer, is not a positive method step and does not distinguish the method from

the prior art because the Examiner has found a similar method step. Applicants should point out where in the process step of claim 1 are the differences from the prior art.

As to claim 5, although narrower anodizing conditions are recited, i.e., "100 to 200 grams of sulfuric acid at a temperature in the range of 18 to 25°C and a current density in the range of about 3 to no more than 10 A/ft² of said surface", there doesn't appear to be any criticality to these conditions since the broader conditions in claim 1 can just as well be applied.

Applicants state that Sekinger doesn't produce a body with a decorative finish, he produces a mold structure. There is absolutely nothing in the entirety of the Sekinger et al. disclosure that would enable anybody to produce a decorative clear aluminum oxide coating on a high magnesium content alloy. In response, claim 5 as presently written does not produce a body with a decorative finish. The claim limitation "having a surface requiring a decorative finish" (claim 5, lines 5-6) is not a positive method step. It is well settled that unpatented claims are given the broadest, most reasonable interpretation and that limitations are not read into the claims without a proper claim basis therefore. *In re Prater* 415 F. 2d 1393, 162 USPQ 541 (CCPA 1969); *In re Zeltz* 893 F. 2d 319, 13 USPQ 1320.

As to producing a clear aluminum oxide coating on a high magnesium content alloy, Sekinger teaches anodizing conditions that encompasses the conditions as presently claimed. Although the Applicant has a different reason for, or advantage

resulting from doing what the prior art relied upon has suggested, it is noted that it is well settled that this is not demonstrative of nonobviousness. *In re Kronig* 190 USPQ 425, 428 (CCPA 1976); *In re Linter* 173 USPQ 560 (CCPA 1972); the prior art motivation or advantage may be different than that of Applicants while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979); *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985) and MPEP § 2144.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

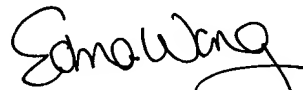
Any inquiry concerning this communication or earlier communications from the

Art Unit: 1741

examiner should be directed to Edna Wong whose telephone number is (703) 308-3818. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Edna Wong
Primary Examiner
Art Unit 1741

EW
November 18, 2002